.DIMMON SRC 13.4

13.5

```
 10 0000           ;*********************************************
 20 0000           ;
 30 0000           ;      DISK MONITOR - DIMMON
 40 0000           ;          VERSION 13.4
 50 0000           ;
 60 0000           ;      NOTE: MUST BE ASSEMBLED AFTER ASSEMBLING
 70 0000           ;            DIMSYM SRC
 80 0000           ;
 90 0000           ;       COPYRIGHT 1978, 1979, 1980
100 0000           ;       HARRY J. SAAL AND LEONARD J. SHUSTEK
110 0000           ;
120 0000           ;
130 0000           ;*********************************************
140 9042                    *=PRBYTE
150 9042 4C469E             JMP WROB     EXTRN ENTRY
160 9045                    *=PRWORD
170 9045 4C399E             JMP WROA     EXTRN ENTRY
180 904E                    *=PRMSG
190 904E 4C47A1             JMP WRMSG    EXTRN ENTRY
200 9000                    *=JMON
210 9000 4C4F9C             JMP CALLE        MAIN ENTRY POINT
220 9C23                    *=ENDSYM
230 9C23           ;*********************************
240 9C23           ;
250 9C23           ;      COMMAND JUMP TABLE
260 9C23           ;
270 9C23           ;*********************************
280 9C23 3A        CMDS     .BYTE ':;PMGX'
280 9C24 3B
280 9C25 50
280 9C26 4D
280 9C27 47
280 9C28 58
290 9C29 4C                 .BYTE 'LSDENVRO'
290 9C2A 53
290 9C2B 44
290 9C2C 45
290 9C2D 4E
290 9C2E 56
290 9C2F 52
290 9C30 4F
300 9C31           ;        .BYTE 'I'  ***NOT IN***
310 9C31 9DE2      ADRS     .DBYTE ALTM-1
320 9C33 9DD5               .DBYTE ALTR-1
330 9C35 9D31               .DBYTE DSPLYR-1
340 9C37 9D4C               .DBYTE DSPLYM-1
350 9C39 9DF5               .DBYTE GO-1
360 9C3B 9E32               .DBYTE EXIT-1
370 9C3D 9EC9               .DBYTE LDE-1
380 9C3F 9EC9               .DBYTE LDE-1
390 9C41 A1A8               .DBYTE DASM-1
400 9C43 9EC9               .DBYTE LDE-1
410 9C45 9EC9               .DBYTE LDE-1
420 9C47 9EC9               .DBYTE LDE-1
430 9C49 9EC9               .DBYTE LDE-1
440 9C4B A1B1              .DBYTE OUTP-1
450 9C4D           ;        .DBYTE GO-1  ***NOT IN***
460 9C4D BBA1              .WORD END
470 9C4F A971      CALLE   LDA #BRKE*256/256   CALL ENTERS HERE
480 9C51 8D1B02            STA BRKVEC          SET UP BREAK VECTOR
490 9C54 A99C              LDA #BRKE/256
```

AD6
6 bytes over!

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500 9C56 8D1C02          STA BRKVEC+1
510 9C59 A9FF           LDA #$FF      FORCE DISK INIT
520 9C5B 8D49AF         STA DSIDES+1  ON BOTH FLOPPIES
530 9C5E 8D4AAF         STA DSIDES+2
540 9C61 78             SEI           TURN OFF INTS
550 9C62 A957           LDA #DINTRH*256/256  MAKE INTERRUPTS
560 9C64 8D1902         STA INTVEC  GO TO COUNTDOWN
570 9C67 A990           LDA #DINTRH/256
580 9C69 8D1A02         STA INTVEC+1
590 9C6C 58             CLI           PERMIT INTS AGAIN
600 9C6D A900            LDA #0    SET ZERO IN FLAGS ON CALL
610 9C6F F00B            BEQ B3
620 9C71 4A      BRKE    LSR A        SET CY FOR PC CORRECTION
630 9C72 68              PLA
640 9C73 851E            STA YR
650 9C75 68              PLA
660 9C76 851D            STA XR
670 9C78 68              PLA
680 9C79 851C            STA ACC
690 9C7B 68              PLA
700 9C7C D8      B3      CLD
710 9C7D 851B            STA FLGS
720 9C7F 68              PLA
730 9C80 69FF            ADC #$FF  CY WAS SET, CORRECT PC FOR BREAK
740 9C82 8519            STA PCL
750 9C84 68              PLA
760 9C85 69FF            ADC #$FF
770 9C87 851A            STA PCH
780 9C89 BA              TSX
790 9C8A 861F            STX SP
800 9C8C 860E            STX TRUESP   USED FOR ABORTS
810 9C8E 58              CLI          CLEAR INTS.
820 9C8F 204890         JSR PRSTR
830 9C92 0D             .BYTE 13,18,'MONITOR',0
830 9C93 12
830 9C94 4D
830 9C95 4F
830 9C96 4E
830 9C97 49
830 9C98 54
830 9C99 4F
830 9C9A 52
830 9C9B 00
840 9C9C A60E    START  LDX TRUESP   RESET STACK
850 9C9E 9A             TXS
860 9C9F A900           LDA #0       READ NEXT CMD
870 9CA1 85CA           STA TXTPT
880 9CA3 850D           STA BRKF     CLEAR BRK FLG
890 9CA5 850A           STA WRAP     CLEAR ADR WRAP FLG
900 9CA7 201D9D         JSR CRLF
910 9CAA 20C09E  ST1    JSR RDOC GET 1RST CHAR
920 9CAD C920           CMP #'  IGNORE SPACES
930 9CAF F0F9           BEQ ST1
940 9CB1 A20D    S0     LDX #ADRS-CMDS-1 LOOKUP CMD
950 9CB3 DD239C  S1     CMP CMDS,X
960 9CB6 D00E           BNE S2
970 9CB8 8520           STA SAVCMD   SAVE CMD LETTER
980 9CBA 8A             TXA
990 9CBB 0A             ASL A    DOUBLE THE VALUE
1000 9CBC AA            TAX
1010 9CBD BD319C        LDA ADRS,X BRANCH ENTRY
1020 9CC0 48            PHA
1030 9CC1 BD329C        LDA ADRS+1,X
1040 9CC4 48            PHA
1050 9CC5 60            RTS GO DO IT
1060 9CC6 CA     S2     DEX
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1070 9CC7 10EA           BPL S1 KEEP SRCHNG
1080 9CC9 4CD19D         JMP ERRSYN   UNRECOGNIZED CMD
1090 9CCC 38       DCMP  SEC    TMP2-TMP0
1100 9CCD A513           LDA TMP2
1110 9CCF E511           SBC TMP0
1120 9CD1 850B           STA DIFF
1130 9CD3 A514           LDA TMP2+1
1140 9CD5 E512           SBC TMP0+1
1150 9CD7 A8             TAY     HIGH ANS IN Y
1160 9CD8 050B           ORA DIFF  TEST FOR EQU 0
1170 9CDA 60             RTS
1180 9CDB A511     PUTP  LDA TMP0   TMP0->PCL,H
1190 9CDD 8519           STA PCL
1200 9CDF A512           LDA TMP0+1
1210 9CE1 851A           STA PCH
1220 9CE3 60             RTS
1230 9CE4          ; DISPLAY MEMORY
1240 9CE4          ; TMP0 IS ADDR, A=# BYTES
1250 9CE4 8521     DM    STA RCNT
1260 9CE6 A000           LDY #0
1270 9CE8 206E9E   DM1   JSR SPACE
1280 9CEB B111           LDA (TMP0),Y
1290 9CED 20469E         JSR WROB
1300 9CF0 20229D         JSR INCTMP
1310 9CF3 C621           DEC RCNT
1320 9CF5 D0F1           BNE DM1
1330 9CF7 60             RTS
1340 9CF8          ; READ, STORE BYTE IF NOT SPACE AND RCNT NOT 0
1350 9CF8 20929E   BYTE  JSR RDOB
1360 9CFB 900F           BCC BY3 WAS SPACE
1370 9CFD A200           LDX #0
1380 9CFF 8111           STA (TMP0,X) SAVE IT
1390 9D01 C111           CMP (TMP0,X) SEE IF VALID
1400 9D03 F007           BEQ BY3
1410 9D05 A93F     ERROPR LDA #'?  ERROR
1420 9D07 204B90         JSR PRCHAR
1430 9D0A D090           BNE START
1440 9D0C 20229D   BY3   JSR INCTMP NXT BYTE
1450 9D0F C621           DEC RCNT
1460 9D11 60             RTS
1470 9D12 A91B     SETR  LDA #FLGS ACCESS REGS
1480 9D14 8511           STA TMP0
1490 9D16 A900           LDA #0
1500 9D18 8512           STA TMP0+1
1510 9D1A A905           LDA #5   POINT TO SP
1520 9D1C 60             RTS
1530 9D1D A90D     CRLF  LDA #$0D
1540 9D1F 4C4B90         JMP PRCHAR
1550 9D22          ; INC TMP0,1 BY 1
1560 9D22 E611     INCTMP INC TMP0
1570 9D24 D006           BNE SETWR
1580 9D26 E612           INC TMP0+1
1590 9D28 D002           BNE SETWR
1600 9D2A E60A           INC WRAP  POINTER WRAPPED.....
1610 9D2C 60       SETWR RTS
1620 9D2D A909     DSPUGH LDA #MNOSYN   BAD FORMAT
1630 9D2F 4C20A1         JMP DPYXIT
1640 9D32 201D9D DSPLYR  JSR CRLF
1650 9D35 206B9E         JSR SPAC2
1660 9D38 A90A           LDA #MNOREG    BANNER
1670 9D3A 2038A1         JSR DPYMSG
1680 9D3D A93B           LDA #';
1690 9D3F 204B90         JSR PRCHAR
1700 9D42 203D9E         JSR WRPC
1710 9D45 20129D         JSR SETR
1720 9D48 20E49C         JSR DM
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1730 9D4B F03C           BEQ DSP2
1740 9D4D 20CFFF  DSPLYM JSR RDSCRN
1750 9D50 C920           CMP #´          SPACE?
1760 9D52 F007           BEQ DPLYC     YES
1770 9D54 C90D           CMP #$0D       CR?
1780 9D56 D0D5           BNE DSPUGH     NO, BAD
1790 9D58 4C679D         JMP DPLYD     SHOW 8 BYTES MORE
1800 9D5B 20839E  DPLYC  JSR RDOA       READ START ADDR
1810 9D5E 90CD           BCC DSPUGH     MUST BE PRESENT
1820 9D60 20CFFF         JSR RDSCRN
1830 9D63 C90D           CMP #$0D      CR?
1840 9D65 D00F           BNE DPLYA    NO
1850 9D67 18      DPLYD CLC          YES, GET 8 BYTES
1860 9D68 A511           LDA TMP0      COMPUTE ADDR
1870 9D6A 6907           ADC #7
1880 9D6C 8513           STA TMP2
1890 9D6E A512           LDA TMP0+1
1900 9D70 6900           ADC #0
1910 9D72 8514           STA TMP2+1
1920 9D74 500B           BVC DPLYB     BR´S EXCEPT FOR 8 BYTES BEFORE SCREEN!!!!
!!
1930 9D76 20739E  DPLYA  JSR T2T2       MOVE TO TMP2
1940 9D79 20839E         JSR RDOA  READ END ADDR
1950 9D7C 9053           BCC ERRSYN MUST BE PRESENT
1960 9D7E 20739E         JSR T2T2  SA TO 0, EA TO 2
1970 9D81 A90B    DPLYB  LDA #MNOHDR  MEM BANNER
1980 9D83 2031A1         JSR DPYMCR
1990 9D86 202AF3  DSP1   JSR BSTSTP STOP HIT?
2000 9D89 F043    DSP2   BEQ BEQS1 YES
2010 9D8B A60A           LDX WRAP STOP ON WRAP
2020 9D8D D03F           BNE BEQS1
2030 9D8F 20CC9C         JSR DCMP DONE?
2040 9D92 903A           BCC BEQS1
2050 9D94 201D9D         JSR CRLF NEW LINE
2060 9D97 A93A           LDA #´:
2070 9D99 204B90         JSR PRCHAR
2080 9D9C A511           LDA TMP0   SAVE OLD PTR
2090 9D9E 8515           STA TMP4
2100 9DA0 A512           LDA TMP0+1
2110 9DA2 8516           STA TMP4+1
2120 9DA4 20399E         JSR WROA CURRENT MEM ADR
2130 9DA7 A908           LDA #8
2140 9DA9 20E49C         JSR DM  DISPLAY, STEP
2150 9DAC A9AB           LDA #128+´+     FANCY CHAR DISPLAY
2160 9DAE 204B90         JSR PRCHAR
2170 9DB1 A000           LDY #0
2180 9DB3 B115    SHOW   LDA (TMP4),Y      GET THE CONTENTS OF THE CELL
2190 9DB5 AA             TAX
2200 9DB6 297F           AND #$7F    MAKE NORMAL CODE
2210 9DB8 C920           CMP #$20    CHECK LEGAL RANGE
2220 9DBA 1002           BPL OKCHAR
2230 9DBC A2C0           LDX #128+´@  PRINT THIS INSTEAD
2240 9DBE 8A      OKCHAR TXA
2250 9DBF 204B90         JSR PRCHAR
2260 9DC2 C8             INY
2270 9DC3 C008           CPY #8      SHOW 8 BYTES
2280 9DC5 D0EC           BNE SHOW
2290 9DC7 A9B3           LDA #128+´3     FANCY BORDER
2300 9DC9 204B90         JSR PRCHAR
2310 9DCC D0B8           BNE DSP1    NEXT ROW
2320 9DCE 4C9C9C  BEQS1  JMP START
2330 9DD1 A909    ERRSYN LDA #MNOSYN
2340 9DD3 4C20A1         JMP DPYXIT
2350 9DD6         ; ALTER REGS
2360 9DD6 20839E  ALTR   JSR RDOA IF SPACE, LEAVE PC
2370 9DD9 9003           BCC AL2
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2380 9DDB 20DB9C          JSR PUTP SET PC
2390 9DDE 20129D  AL2     JSR SETR SET REGS
2400 9DE1 D007            BNE A4
2410 9DE3         ; ALTER MEM
2420 9DE3 20839E  ALTM    JSR RDOA READ MEM ADDR
2430 9DE6 90E9            BCC ERRSYN BAD
2440 9DE8 A908            LDA #8
2450 9DEA 8521    A4      STA RCNT
2460 9DEC 20C09E  A5      JSR RDOC
2470 9DEF 20F89C          JSR BYTE
2480 9DF2 D0F8            BNE A5 MORE
2490 9DF4 F0D8    A9      BEQ BEQS1
2500 9DF6 20CFFF  GO      JSR RDSCRN
2510 9DF9 C90D            CMP #$0D
2520 9DFB F023            BEQ G1  IF CR, EXIT
2530 9DFD A211           LDX #$11    GA: GO TO $1160
2540 9DFF A060           LDY #$60        (ASSEMBLER)
2550 9E01 C941           CMP #'A
2560 9E03 F008           BEQ GOSPEC
2570 9E05 A270           LDX #$70    GE: GO TO $7000
2580 9E07 A000           LDY #$00        (EDITOR)
2590 9E09 C945           CMP #'E
2600 9E0B D007           BNE GOSP
2610 9E0D 861A    GOSPEC STX PCH
2620 9E0F 8419           STY PCL
2630 9E11 4C209E         JMP G1
2640 9E14 C920    GOSP    CMP #'  MUST BE SPACE
2650 9E16 D0B9            BNE ERRSYN
2660 9E18 20839E          JSR RDOA GET TARGET
2670 9E1B 9003            BCC G1
2680 9E1D 20DB9C          JSR PUTP UPDATE PC
2690 9E20 A61F    G1      LDX SP RESTORE HIM
2700 9E22 9A              TXS
2710 9E23 A51A            LDA PCH
2720 9E25 48              PHA
2730 9E26 A519            LDA PCL
2740 9E28 48              PHA
2750 9E29 A51B            LDA FLGS
2760 9E2B 48              PHA
2770 9E2C A51C            LDA ACC
2780 9E2E A61D            LDX XR
2790 9E30 A41E            LDY YR
2800 9E32 40              RTI
2810 9E33 A61F    EXIT    LDX SP
2820 9E35 9A              TXS
2830 9E36 4C8BC3          JMP BSWARM  RESTART BASIC
2840 9E39         ;   WRITE WORD FROM TMP'S
2850 9E39 A201    WROA    LDX #1   FROM TMP0
2860 9E3B D002            BNE WROA1
2870 9E3D A209    WRPC    LDX #9
2880 9E3F B511    WROA1   LDA TMP0,X
2890 9E41 20469E          JSR WROB
2900 9E44 B510            LDA TMP0-1,X
2910 9E46         ; FALL INTO.....
2920 9E46 48      WROB     PHA   WRITE AC AS TWO HEX CHARS
2930 9E47 4A              LSR A
2940 9E48 4A              LSR A
2950 9E49 4A              LSR A
2960 9E4A 4A              LSR A
2970 9E4B 205D9E          JSR PRHEX  CONVERT
2980 9E4E 68              PLA
2990 9E4F 290F            AND #$0F
3000 9E51 4C5D9E          JMP PRHEX CONVERT 2ND HEX
3010 9E54         ; AND FALL INTO.....
3020 9E54 48      WRTWO   PHA  WRITE X THEN A
3030 9E55 8A              TXA
```

BEQ GOSPEC
LDX #$60
CMP #'G
BEQ

GE: GO TO $6000

BEQ G1 (UNC.)

```
3040 9E56 204B90          JSR PRCHAR
3050 9E59 68              PLA
3060 9E5A 4C4B90          JMP PRCHAR
3070 9E5D 18        PRHEX CLC
3080 9E5E 6906            ADC #6
3090 9E60 69F0            ADC #$F0
3100 9E62 9002            BCC ASC1
3110 9E64 6906            ADC #6
3120 9E66 693A      ASC1  ADC #$3A
3130 9E68 4C4B90          JMP PRCHAR
3140 9E6B 206E9E    SPAC2 JSR SPACE
3150 9E6E A920      SPACE LDA #' SPACE....
3160 9E70 4C4B90          JMP PRCHAR
3170 9E73 A202      T2T2  LDX #2  SWAP TMP0,2
3180 9E75 B510      T2T21 LDA TMP0-1,X
3190 9E77 48              PHA
3200 9E78 B512            LDA TMP2-1,X
3210 9E7A 9510            STA TMP0-1,X
3220 9E7C 68              PLA
3230 9E7D 9512            STA TMP2-1,X
3240 9E7F CA              DEX
3250 9E80 D0F3            BNE T2T21
3260 9E82 60              RTS
3270 9E83           ; READ HEX ADDR, RETURN LO IN TMP0
3280 9E83           ;                       HI IN TMP0+1
3290 9E83           ;                       SET CY=1
3300 9E83           ; IF SPACE, SET CY=0
3310 9E83 20929E    RDOA  JSR RDOB
3320 9E86 9002            BCC RDOA2
3330 9E88 8512            STA TMP0+1
3340 9E8A 20929E    RDOA2 JSR RDOB
3350 9E8D 9002            BCC RDEXIT  QUIT ON SPACE
3360 9E8F 8511            STA TMP0
3370 9E91 60        RDEXIT RTS
3380 9E92           ;
3390 9E92           ;  READ HEX BYTE TO A. SET CY,
3400 9E92           ;    MAKE CY=0 IF SPACE
3410 9E92           ;
3420 9E92 20C09E    RDOB  JSR RDOC    READ THE CHAR
3430 9E95 C920            CMP #'   SPACE..
3440 9E97 D009            BNE RDOB2
3450 9E99 20C09E          JSR RDOC    READ THE NEXT
3460 9E9C C920            CMP #'   SPACE..
3470 9E9E D00E            BNE RDOB3
3480 9EA0 18              CLC   IT WAS SPACE
3490 9EA1 60              RTS
3500 9EA2 20B59E    RDOB2 JSR HEXIT    MAKE HEX
3510 9EA5 0A              ASL A
3520 9EA6 0A              ASL A
3530 9EA7 0A              ASL A
3540 9EA8 0A              ASL A
3550 9EA9 850F            STA ACMD
3560 9EAB 20C09E          JSR RDOC  GET THE 2ND
3570 9EAE 20B59E    RDOB3 JSR HEXIT
3580 9EB1 050F            ORA ACMD  NOW IN A BYTE
3590 9EB3 38              SEC
3600 9EB4 60              RTS
3610 9EB5 C93A      HEXIT CMP #':
3620 9EB7 08              PHP   SAVE THE CMP
3630 9EB8 290F            AND #$0F   MASK IT
3640 9EBA 28              PLP
3650 9EBB 9002            BCC HEX09  IN 0-9
3660 9EBD 6908            ADC #8     WAS A-F
3670 9EBF 60        HEX09 RTS
3680 9EC0 20CFFF    RDOC  JSR RDSCRN   GET A CHAR
3690 9EC3 C90D            CMP #$0D    IS IT CR?
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```
3700 9EC5 D0F8           BNE HEX09   NOT, RETURN IT
3710 9EC7 4C9C9C         JMP START
3720 9ECA A900   LDE     LDA #0
3730 9ECC 85EE           STA FNLEN
3740 9ECE 85FA           STA FNADR+1
3750 9ED0 85F7           STA BSBSL
3760 9ED2 85F8           STA BSBSH
3770 9ED4 853C           STA REPFLG
3780 9ED6 A923           LDA #FNAME
3790 9ED8 85F9           STA FNADR
3800 9EDA 20C09E        JSR RDOC     CHAR AFTER CMD
3810 9EDD C952          CMP #'R      REPLACE?
3820 9EDF D007          BNE RDDEV    NO
3830 9EE1 A901          LDA #1       YES
3840 9EE3 853C          STA REPFLG
3850 9EE5 20C09E        JSR RDOC     SKIP NEXT BYTE
3860 9EE8 20929E RDDEV   JSR RDOB    GET DEVNO
3870 9EEB 85F1           STA DEVNO
3880 9EED 20CFFF         JSR RDSCRN
3890 9EF0 C90D           CMP #$0D       CR?
3900 9EF2 F078           BEQ L3         SEE IF ITS ENUF
3910 9EF4 A200           LDX #0      INITIALIZE INDEX
3920 9EF6 20CFFF  RD2    JSR RDSCRN GET THE NAME
3930 9EF9 C92C           CMP #',
3940 9EFB D003           BNE PPP4
3950 9EFD 4C68A0         JMP L4
3960 9F00 C90D    PPP4   CMP #$0D     CR ?
3970 9F02 D05D           BNE PPP5     NO
3980 9F04 A520           LDA SAVCMD   LAST CMD
3990 9F06 C945           CMP #'E      WAS IT ERASE?
4000 9F08 D00D           BNE SVX      NO
4010 9F0A A5F1           LDA DEVNO
4020 9F0C 20DEA0         JSR VALIDT   CHECK IT
4030 9F0F 200F90 DODEL   JSR FDELET   ERASE IT
4040 9F12 20B29F         JSR FCHK
4050 9F15 F0F8           BEQ DODEL   (UNC) RETRY IF DISK CHANGE
4060 9F17 C953   SVX     CMP #'S      WAS IT SAVE?
4070 9F19 D051           BNE L3       NO.
4080 9F1B A5F1           LDA DEVNO    YES, CHECK TYPE
4090 9F1D 29F0           AND #$F0
4100 9F1F C9A0           CMP #FASM    ASM SOURCE?
4110 9F21 D012           BNE SVX2     NO.
4120 9F23 ACCA12         LDY $12CA    YES, GET START
4130 9F26 AEC912         LDX $12C9
4140 9F29 2081A0         JSR PUTBSL
4150 9F2C ACFF12         LDY $12FF    GET END PTR
4160 9F2F AEFE12         LDX $12FE
4170 9F32 4CBCA0         JMP PUTEAL   SET END PTR
4180 9F35 C9B0   SVX2    CMP #FBASIC BASIC SOURCE?
4190 9F37 D00E           BNE SVX3     NO.
4200 9F39 A200           LDX #0       YES.
4210 9F3B A004           LDY #$4      SAVE FROM 0400
4220 9F3D 2081A0         JSR PUTBSL
4230 9F40 A67C           LDX VARTAB   END OF BASIC TEXT
4240 9F42 A47D           LDY VARTAB+1
4250 9F44 4CBCA0         JMP PUTEAL   SET END PTR
4260 9F47 C9C0   SVX3    CMP #FSYMBL SYMBOL TABLE?
4270 9F49 D021           BNE L3       NO, NOTHING SPECIAL
4280 9F4B AC0B03         LDY $030B    BEGIN OF SYMB.
4290 9F4E AE0A03         LDX $030A
4300 9F51 2081A0         JSR PUTBSL
4310 9F54 AECB12         LDX $12CB    END OF ASS STORAGE
4320 9F57 ACCC12         LDY $12CC
4330 9F5A E8             INX          POINT PAST BY ONE
4340 9F5B D001           BNE SVX1
4350 9F5D C8             INY
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4360 9F5E 4CBCA0 SVX1   JMP PUTEAL  SET END PTR
4370 9F61 E010   PPP5   CPX #DENAML MAX LEN
4380 9F63 F091          BEQ RD2
4390 9F65 9523          STA FNAME,X
4400 9F67 E6EE          INC FNLEN
4410 9F69 E8            INX
4420 9F6A D08A          BNE RD2
4430 9F6C A520    L3    LDA SAVCMD      OLD CMD
4440 9F6E C94C          CMP #'L         IS IT A LOAD?
4450 9F70 F022          BEQ LD2         LOADS OK.
4460 9F72 C952          CMP #'R     RUN??
4470 9F74 F01E          BEQ LD2     LIKE LOAD
4480 9F76 C956          CMP #'V         VERIFY??
4490 9F78 D004          BNE L3A         NO
4500 9F7A A201          LDX #1          SET VERIFY FLAG
4510 9F7C D018          BNE LD2A
4520 9F7E C94E    L3A   CMP #'N         DIRECTORY LIST?
4530 9F80 F003          BEQ L3C        NO, YOU LOSE.
4540 9F82 4CD19D        JMP ERRSYN
4550 9F85 20DEA0 L3C    JSR VALIDT     CHECK REQUEST
4560 9F88 A900          LDA #0      GIVE LONG FORM
4570 9F8A 853D          STA LSTFLG  OF DIR LIST
4580 9F8C 202190 DOLIST JSR FDLIST     SHOW IT
4590 9F8F 20B29F        JSR FCHK
4600 9F92 F0F8          BEQ DOLIST (UNC) RETRY IF DISK CHANGE
4610 9F94 A200    LD2   LDX #0   SET LOAD FLAG
4620 9F96 8E0B02  LD2A  STX VERCK
4630 9F99 A5F1          LDA DEVNO
4640 9F9B D003          BNE LD2B    ZERO IS BAD
4650 9F9D 4C1EA1        JMP BADDEV
4660 9FA0 29F0   LD2B   AND #$F0    CHECK HIGH DIGIT
4670 9FA2 D003          BNE *+5
4680 9FA4 4C2DA0            JMP TPLOAD  ZERO IS TAPE
4690 9FA7 20DEA0        JSR VALIDT  CHECK RANGE
4700 9FAA 200690 DOREAD JSR FREAD   READ IT IN
4710 9FAD 20B29F        JSR FCHK
4720 9FB0 F0F8          BEQ DOREAD (UNC) RETRY IF DISK CHANGE
4730 9FB2         ;
4740 9FB2 A53E    FCHK  LDA RCODE   CHECK FILSYS RETURN CODE
4750 9FB4 C90A          CMP #10     DISK CHANGE?
4760 9FB6 F074          BEQ RETRN   YES: RETURN EQ
4770 9FB8 68            PLA         ELSE PURGE RETURN ADDR
4780 9FB9 68            PLA
4790 9FBA A53E          LDA RCODE
4800 9FBC F003          BEQ LDSHOW  OK
4810 9FBE 4C20A1        JMP DPYXIT  WRITE ERR MSG AND QUIT
4820 9FC1         ;
4830 9FC1         ;
4840 9FC1         ;
4850 9FC1 A520    LDSHOW LDA SAVCMD
4860 9FC3 C94C          CMP #'L       LOAD?
4870 9FC5 F018          BEQ LSHOW
4880 9FC7 C952          CMP #'R       RUN??
4890 9FC9 F014          BEQ LSHOW  DO LIKE LOAD
4900 9FCB C953          CMP #'S     SAVE?
4910 9FCD F00C          BEQ SVSHOW  YES
4920 9FCF C945          CMP #'E       ERASE?
4930 9FD1 D005          BNE LDXT      NO, IGNORE NAME
4940 9FD3 A90D          LDA #MNOERA   "ERASED: "
4950 9FD5 2074A1 LDSH   JSR SHOWNM
4960 9FD8 4C9C9C  LDXT  JMP START
4970 9FDB A90F   SVSHOW LDA #MNOSVD "SAVED:"
4980 9FDD D0F6          BNE LDSH
4990 9FDF A90E    LSHOW  LDA #MNOLDD     "LOADED:"
5000 9FE1 2074A1        JSR SHOWNM
5010 9FE4 A520          LDA SAVCMD  LAST CMD
```

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5020 9FE6 C952          CMP #'R     RUN??
5030 9FE8 D003          BNE LDFIX   NO,LOAD
5040 9FEA 6C3A00        JMP (CMEMAD) GO GO GO
5050 9FED               ;
5060 9FED               ; DO SPECIAL LOAD FIXUPS
5070 9FED               ;
5080 9FED A5F1    LDFIX  LDA DEVNO
5090 9FEF 29F0           AND #$F0
5100 9FF1 C9A0           CMP #FASM    ASSEMBLER
5110 9FF3 D00B           BNE LDFIX2
5120 9FF5 2022A0         JSR ADDAS  COMPUTE END ADDR
5130 9FF8 8EFE12         STX $12FE  STORE IN $12FE
5140 9FFB 8DFF12         STA $12FF
5150 9FFE D065           BNE PPP7
5160 A000 C9B0    LDFIX2 CMP #FBASIC  BASIC
5170 A002 D009           BNE LDFIX3
5180 A004 2022A0         JSR ADDAS  COMPUTE END ADDR
5190 A007 867C           STX VARTAB STORE IN VARTAB
5200 A009 857D           STA VARTAB+1
5210 A00B D058           BNE PPP7
5220 A00D C9C0    LDFIX3 CMP #FSYMBL  CYMBOL TABLE
5230 A00F D054           BNE PPP7
5240 A011 A538           LDA MEMAD  PUT START ADDR IN 12FA
5250 A013 8DFA12         STA $12FA
5260 A016 A539           LDA MEMAD+1
5270 A018 8DFB12         STA $12FB
5280 A01B A918           LDA #$18   PATCH ASSEMBLER TO USE IT
5290 A01D 8D5508         STA $0855
5300 A020 D043           BNE PPP7
5310 A022               ;
5320 A022               ;  X,A=CMEMAD+MEMSIZ
5330 A022               ;
5340 A022 18      ADDAS  CLC
5350 A023 A53A           LDA CMEMAD
5360 A025 6535           ADC MEMSIZ
5370 A027 AA             TAX
5380 A028 A53B           LDA CMEMAD+1
5390 A02A 6536           ADC MEMSIZ+1
5400 A02C 60      RETRN  RTS
5410 A02D               ;
5420 A02D A5F1    TPLOAD  LDA DEVNO  CHECK DEVICE
5430 A02F C903           CMP #3     LEGAL??
5440 A031 9003           BCC TP2    YES
5450 A033 4C1EA1         JMP BADDEV  NO.
5460 A036 2067F6 TP2      JSR BSZZZ
5470 A039 203BF8          JSR CSTE1
5480 A03C 20FFF3          JSR LD300
5490 A03F A5EE            LDA FNLEN    NAME LENGTH
5500 A041 F00A            BEQ LD150
5510 A043 2095F4          JSR BSFAF    FIND FILE W. NAME
5520 A046 D00A            BNE LD170    FOUND..
5530 A048 A90C    LD10    LDA #MNOTAP  BAD..
5540 A04A 4C20A1          JMP DPYXIT   TAPE
5550 A04D 20AEF5  LD150   JSR BSFAH    FIND 1ST FILE
5560 A050 F0F6            BEQ LD10     BAD...
5570 A052 204DF6  LD170   JSR LDAD2    MOVE MEM ADR FROM HEADER (E3,E4->F7,F8)
5580 A055 2022F4          JSR LD400    SAY 'LOADING'..
5590 A058 208AF8          JSR BSTRD    READ IT
5600 A05B 2013F9          JSR TWAIT
5610 A05E AD0C02          LDA BSSTAT   STATUS
5620 A061 2910            AND #SPERR   ERRORS?
5630 A063 D0E3            BNE LD10     YES
5640 A065 4C9C9C  PPP7    JMP START
5650 A068 20839E  L4      JSR RDOA     PARSE REST OF CMD
5660 A06B A611            LDX TMP0      GET 0,1,2 HEX ADDRS
5670 A06D A412            LDY TMP0+1
```

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5680 A06F 2081A0          JSR PUTBSL
5690 A072 20CFFF  L5      JSR RDSCRN
5700 A075 C90D            CMP #$0D CR??
5710 A077 D00D            BNE L5A  END CMD
5720 A079 4C6C9F          JMP L3
5730 A07C A909    LSYN    LDA #MNOSYN
5740 A07E 4C20A1          JMP DPYXIT
5750 A081 86F7   PUTBSL STX BSBSL   SET START ADR
5760 A083 84F8           STY BSBSH
5770 A085 60             RTS
5780 A086          ;
5790 A086 C92C    L5A     CMP #',  SAW ADDR, ...
5800 A088 D0F2            BNE LSYN BAD..
5810 A08A 20839E          JSR RDOA  NEXT ADDR
5820 A08D A611            LDX TMP0
5830 A08F A412            LDY TMP0+1
5840 A091 84E6           STY BSEAH
5850 A093 86E5           STX BSEAL
5860 A095 20CFFF         JSR RDSCRN  DONE?
5870 A098 C90D           CMP #$D     CR?
5880 A09A F024           BEQ PUTS    YES
5890 A09C C92C           CMP #',     NO
5900 A09E D0DC           BNE LSYN
5910 A0A0 20DEA0         JSR VALIDT  WONT RETURN IF TAPE
5920 A0A3 20839E         JSR RDOA    LOADIT ADDR
5930 A0A6 A611           LDX TMP0
5940 A0A8 A412           LDY TMP0+1
5950 A0AA 8638           STX MEMAD
5960 A0AC 8439           STY MEMAD+1 TRUE ADDRESS LATER
5970 A0AE A520           LDA SAVCMD
5980 A0B0 C953           CMP #'S     SAVE?
5990 A0B2 D0C8           BNE LSYN    NO, BAAD
6000 A0B4 200C90 DOWRTD JSR FWRITD  WRITE, OFFSET
6010 A0B7 20B29F         JSR FCHK
6020 A0BA F0F8            BEQ DOWRTD (UNC) RETRY IF DISK CHANGE
6030 A0BC 84E6   PUTEAL  STY BSEAH
6040 A0BE 86E5           STX BSEAL
6050 A0C0 A520   PUTS    LDA SAVCMD      OLD CMD
6060 A0C2 C953           CMP #'S         SAVE?
6070 A0C4 D0B6           BNE LSYN    NO..
6080 A0C6 A5F1           LDA DEVNO  ITS SAVE
6090 A0C8 29F0          AND #$F0    CHECK HI DIGIT
6100 A0CA D007          BNE MYSAVE  NON-ZERO IS DISK
6110 A0CC AA            TAX         ZERO..
6120 A0CD 20B1F6         JSR BSSAVE  TAPE SAVE
6130 A0D0 4C9C9C  P3A    JMP START
6140 A0D3 20DEA0  MYSAVE JSR VALIDT
6150 A0D6 200990 DOWRIT  JSR FWRITE
6160 A0D9 20B29F         JSR FCHK   CHECK RCODE
6170 A0DC F0F8           BEQ DOWRIT (UNC) RETRY IF DISK CHANGE
6180 A0DE          ;
6190 A0DE          ;   VALIDATE DEVICE NO IN DEVNO
6200 A0DE          ;    RETURNS IF OKAY, ELSE TO START
6210 A0DE A5F1    VALIDT LDA DEVNO   GET DEVNO
6220 A0E0 AA             TAX
6230 A0E1 29F0           AND #$F0
6240 A0E3 F039          BEQ BADDEV  ZERO IS TAPE ONLY
6250 A0E5 8533           STA FTYPE
6260 A0E7 8A             TXA
6270 A0E8 290F           AND #$0F
6280 A0EA 8534           STA DRIVE
6290 A0EC F030           BEQ BADDEV  CANT BE ZERO
6300 A0EE A920           LDA #'  PAD BLANK
6310 A0F0 A6EE           LDX FNLEN  CURRENT LENGTH
6320 A0F2 D007           BNE V3     ALL BLANK?
6330 A0F4 A02A           LDY #'*    YES
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6340 A0F6 8423            STY FNAME  FORCE WILDCARD
6350 A0F8 8422            STY STARED SET STAR FLAG
6360 A0FA E8              INX        LENGTH NOW ONE
6370 A0FB E010    V3      CPX #DENAML  DONE?
6380 A0FD 1005            BPL V4     YES
6390 A0FF 9523            STA FNAME,X   PAD A BLANK
6400 A101 E8              INX
6410 A102 D0F7            BNE V3
6420 A104 A5F7    V4      LDA BSBSL  MOVE TO ADDR FOR DISK
6430 A106 8538            STA MEMAD
6440 A108 853A           STA CMEMAD
6450 A10A A5F8            LDA BSBSH
6460 A10C 8539            STA MEMAD+1
6470 A10E 853B           STA CMEMAD+1
6480 A110 38              SEC
6490 A111 A5E5            LDA BSEAL  ENDL
6500 A113 E5F7            SBC BSBSL  ST L
6510 A115 8535            STA MEMSIZ SAVE LENGTH
6520 A117 A5E6            LDA BSEAH
6530 A119 E5F8            SBC BSBSH
6540 A11B 8536            STA MEMSIZ+1  FOR WRITE...
6550 A11D 60              RTS
6560 A11E A908    BADDEV LDA #MNOIDN   ILLEGAL DEV NO
6570 A120 C901   DPYXIT CMP #1       DISK ERROR?
6580 A122 D007           BNE DPYXT1  NO
6590 A124 AE3DAF         LDX DSKERR  WHICH ONE?
6600 A127 E00B           CPX #11     ILG DEV?
6610 A129 F0F3           BEQ BADDEV  YES
6620 A12B 2054A1  DPYXT1 JSR DPYMWH    SHOW WITH "BAD"
6630 A12E 4C9C9C  ABRT   JMP START    ABORT
6640 A131                ;
6650 A131                ;  DISPLAY MSG USING OFFSET IN A
6660 A131                ;     PRECEDED BY CRLF.....
6670 A131                ;
6680 A131 48      DPYMCR PHA
6690 A132 A90D           LDA #$0D
6700 A134 204B90         JSR PRCHAR
6710 A137 68             PLA
6720 A138                ;
6730 A138                ;  FALL INTO DPYMSG
6740 A138                ;
6750 A138                ;   DISPLAY MSG TEXT FROM MSGLST
6760 A138                ;    USING MSG NUMBER IN A
6770 A138                ;
6780 A138 A8      DPYMSG TAY
6790 A139 B9139C         LDA MPTBEG,Y
6800 A13C 18             CLC
6810 A13D 6920           ADC #MSGLST*256/256
6820 A13F 8517           STA MSGPTR
6830 A141 A900           LDA #0
6840 A143 699B           ADC #MSGLST/256
6850 A145 8518           STA MSGPTR+1
6860 A147                ;
6870 A147                ;   FALL INTO WRMSG
6880 A147                ;
6890 A147                ;    DISPLAY MSG POINTED TO BY MSGPTR ($17,18)
6900 A147                ;      UNTIL ZERO BYTE
6910 A147                ;      RETURNS WITH Z SET
6920 A147                ;
6930 A147 A000    WRMSG  LDY #0
6940 A149 B117    WRMS1  LDA (MSGPTR),Y    GET CHAR
6950 A14B F006           BEQ WRMS2     DONE?
6960 A14D 204B90         JSR PRCHAR    NO
6970 A150 C8             INY
6980 A151 D0F6           BNE WRMS1
6990 A153 60      WRMS2  RTS
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7000 A154           ;
7010 A154           ;     DISPLAY MESSAGE WITH HEADER "BAD: "
7020 A154           ;      PASS MESSAGE NUMBER IN A
7030 A154           ;
7040 A154 48       DPYMWH PHA
7050 A155 A900             LDA #MNOBAD
7060 A157 2031A1           JSR DPYMCR
7070 A15A 68               PLA
7080 A15B 48              PHA
7090 A15C 2038A1           JSR DPYMSG   SHOW MSG
7100 A15F 68               PLA          MSG NO
7110 A160 C901             CMP #1       DISK ERROR?
7120 A162 D006             BNE DPYMW1   NO
7130 A164 AD3DAF           LDA DSKERR   YES, SHOW IT
7140 A167 4C4290           JMP PRBYTE   IN HEX
7150 A16A C906    DPYMW1   CMP #6       DIR ERROR???
7160 A16C D0E5             BNE WRMS2    NO
7170 A16E AD42AF           LDA DIRCOD   YES, SHOW DIRCOD
7180 A171 4C4290           JMP PRBYTE   IN HEX
7190 A174           ;
7200 A174           ;
7210 A174 2031A1   SHOWNM JSR DPYMCR      A REG HAS MSGNO
7220 A177 A5F1             LDA DEVNO
7230 A179 204290           JSR PRBYTE          SHOW UNIT #
7240 A17C A92C             LDA #',
7250 A17E 204B90           JSR PRCHAR
7260 A181 A533             LDA FNAME+DENAML    SAVE THIS
7270 A183 48               PHA                 LAST BYTE
7280 A184 A900             LDA #0              WHILE WE PATCH
7290 A186 8533             STA FNAME+DENAML    HIM TO ZERO
7300 A188 A923             LDA #FNAME*256/256
7310 A18A 8517             STA MSGPTR          PRINT MSG FROM
7320 A18C A900             LDA #FNAME/256      FNAME AREA
7330 A18E 8518             STA MSGPTR+1
7340 A190 2047A1           JSR WRMSG
7350 A193 68               PLA
7360 A194 8533             STA FNAME+DENAML    RESTORED....
7370 A196 60               RTS
7380 A197 20CFFF   SIMPLE  JSR RDSCRN
7390 A19A C90D             CMP #$0D     CR?
7400 A19C F00A             BEQ SIMP1    YES
7410 A19E C920             CMP #'       BLANK?
7420 A1A0 F003             BEQ SIMP2    YES
7430 A1A2 4CD19D           JMP ERRSYN   NO
7440 A1A5 20839E   SIMP2   JSR RDOA     READ ADDRESS
7450 A1A8 60       SIMP1   RTS
7460 A1A9 2097A1   DASM    JSR SIMPLE   PARSE IT
7470 A1AC 200390           JSR JDSASM    DISASSM HIM
7480 A1AF 4C9C9C           JMP START
7490 A1B2 20CFFF OUTP    JSR RDSCRN   READ CR IN
7500 A1B5 205A90         JSR PRTENB   ENABLE PRINTER
7510 A1B8 4C9C9C         JMP START
7520 A1BB           END    .END
```